

NON-PUBLIC?: N
ACCESSION #: 9308300305
LICENSEE EVENT REPORT (LER)

FACILITY NAME: Vogtle Electric Generating Plant - Unit 1 PAGE: 1 OF 4

DOCKET NUMBER: 05000424

TITLE: REACTOR TRIP DURING MAINTENANCE DUE TO LOW PRESSURIZER
PRESSURE SIGNAL
EVENT DATE: 07/28/93 LER #: 93-009-00 REPORT DATE: 08/23/93

OTHER FACILITIES INVOLVED:
DOCKET NO: 05000

OPERATING MODE: 1 POWER LEVEL: 100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR
SECTION:
50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:
NAME: Mehdi Sheibani, Nuclear Safety and TELEPHONE: (706) 826-3209
Compliance

COMPONENT FAILURE DESCRIPTION:
CAUSE: B SYSTEM: AA COMPONENT: ECD MANUFACTURER: W120
REPORTABLE NPRDS: N

SUPPLEMENTAL REPORT EXPECTED: NO

ABSTRACT:

On July 28, 1993, technicians replaced pressurizer pressure transmitter 1PT-457 after it had displayed signs of failure. Following calibration, personnel initiated action to place the new transmitter in service by opening the transmitter's isolation valve, prior to pressurizing the sensing line and transmitter. This caused the pressure in the sensing line, which is shared with transmitter 1PT-458, to drop low enough to trip the 1PT-458 bistable for low pressurizer pressure. Because the bistable for 1PT-457 was already tripped due to the transmitter being out of service, the required 2 of 4 logic for a reactor trip now existed and a trip occurred at 2350 EDT. Upon recovery from the reactor trip, normal unit operations resumed in Mode 3 (Hot Standby).

The cause of this event was a cognitive personnel error on the part of

the technicians and their foreman in not returning 1PT-457 to service in accordance with procedural requirements. Certain steps in the procedure that would have ensured that the sensing line and transmitter were pressurized were omitted during performance of the evolution. The technicians and foreman involved were disciplined and reminded of the importance of procedural compliance.

END OF ABSTRACT

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A. REQUIREMENT FOR REPORT

This report is required per 10 CFR 50.73 (a)(2)(iv) because an unplanned actuation of the reactor protection system (RPS) occurred.

B. UNIT STATUS AT TIME OF EVENT

At the time of this event, Unit 1 was operating in Mode 1 (Power Operation) at 100 percent of rated thermal power. Other than that described herein, there was no inoperable equipment which contributed to the occurrence of this event.

C. DESCRIPTION OF EVENT

On July 28, 1993, technicians replaced pressurizer pressure transmitter 1PT-457 after it had displayed signs of failure. Following calibration, personnel initiated action to place the new transmitter in service by opening the transmitter's isolation valve prior to pressurizing the sensing line and transmitter. This caused the pressure in the sensing line, which is shared with transmitter 1PT-458, to momentarily drop low enough to trip the 1PT-458 bistable for low pressurizer pressure. Because the bistable for 1PT-457 was already tripped due to the transmitter being out of service, the required 2 of 4 logic for a reactor trip now existed and a trip occurred at 2350 EDT. Control room personnel observed expected reactor trip indications with the exceptions of digital rod position indication for control rod M12, which continued to indicate being fully withdrawn on one of the two channels of rod position instrumentation. Subsequent troubleshooting determined that all rods were inserted. Auxiliary feedwater (AFW) actuated as designed when steam generators reached their low level actuation setpoints. Normal unit operation resumed in Mode 3 (Hot Standby).

D. CAUSE OF EVENT

The cause of this event was a cognitive personnel error on the part of Georgia Power Company technicians and their foreman in not returning 1PT-457 to service in accordance with procedural requirements. Certain steps in the procedure that would have ensured that the sensing line and transmitter were pressurized were omitted during performance of the evolution. Contributing factors include:

1. The pre-job briefing did not discuss the sensitive nature of working on components that shared sensing lines and did not clearly delineate individual job responsibilities for the different technicians who were performing their tasks in two separate locations (the containment building and the control room).

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2. Technicians in the containment building had the calibration data sheet, but not the appropriate steps of the procedure. The technician in the control room had a copy of the procedure, but did not have step-by-step control of the evolution.

There were no unusual characteristics of the work location which contributed to the occurrence of the personnel error.

A failed encoder circuit card was the cause of the failure of one channel of digital rod position indication for control rod M12.

E. ANALYSIS OF EVENT

No actual pressurizer low pressure condition existed, and the reactor coolant system (RCS) maintained normal temperature and pressure throughout the event. When the reactor trip occurred, AFW actuated as designed to provide steam generator water for RCS cooling and control room personnel conservatively responded to the control rod M12 fully withdrawn status as if the rod had actually failed to insert. Based on these considerations, there was no adverse effect on plant safety or on the health and safety of the public as a result of this event.

F. CORRECTIVE ACTIONS

1. The technicians and foreman involved have been disciplined and reminded of the importance of procedural compliance. Additionally, the following actions are in progress:

- a. The pre-job briefing checklist will be revised by September 15, 1993, regarding work to be performed on sensitive instruments.
- b. Procedure 00054-C, "Rules For Performing Procedures" will be revised by September 15, 1993, to more clearly state when procedures are to be "in hand" and to describe performance of procedures that require coordinated action at numerous locations.
- c. Instruments with shared sensing lines that could cause transients under circumstances similar to this event will be labeled appropriately during the next refueling outage on each unit. Likewise, these instruments will be annotated in the work order database by September 15, 1993.
- d. Appropriate department managers will meet with their employees to discuss procedural compliance expectations by September 11, 1993.

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- 2. The failed encoder circuit card in the M12 control rod position indication channel has been replaced.

G. ADDITIONAL INFORMATION

1. Failed Components:

Rod position indication encoder circuit card manufactured by
Westinghouse Electric Corporation
Part No. 1468F3G01

2. Previous Similar Events:

None

3. Energy Industry Identification System Code:

Reactor Coolant System - AB

Control Rod Drive System - AA

Auxiliary Feedwater System - BA

Georgia Power Company
40 Inverness Center Parkway
Post Office Box 1295
Birmingham, Alabama 35201
Telephone 205 877-7122

C. K. McCoy
Vice President, Nuclear
Vogtle Project Georgia Power
the southern electric system

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LCV-0122

Docket No. 50-424

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Gentlemen:

VOGTLE ELECTRIC GENERATING PLANT
LICENSEE EVENT REPORT
REACTOR TRIP DURING MAINTENANCE
DUE TO LOW PRESSURIZER PRESSURE SIGNAL

In accordance with the requirements of 10 CFR 50.73, Georgia Power Company submits the enclosed report related to an event which occurred on July 28, 1993.

Sincerely,

C. K. McCoy

CKM/NJS

Enclosure: LER 50-424/1993-009

xc: Georgia Power Company
Mr. J. B. Beasley, Jr.
Mr. M. Sheibani
NORMS

U. S. Nuclear Regulatory Commission
Mr. S. D. Ebnetter, Regional Administrator
Mr. D. S. Hood, Licensing Project Manager, NRR
Mr. B. R. Bonser, Senior Resident Inspector, Vogtle

*** END OF DOCUMENT ***
